

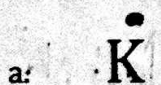
Name _____ Date _____ Period _____

IONIC BONDING PRACTICE

1. An ionic bond forms between a METAL and a NON-METAL.
2. Metals typically form CATIONS, or positively charged atoms. This means that the atom LOST electrons.
3. Nonmetals typically form an ANIONS, or a negatively charged atom. This means that the atom GAINS electrons.
4. Fill in the table below:

Group Number	Group Name	# Valence Electrons	Will it GAIN or LOSE electrons to fill its outer shell?	Charge of the Ion
1	Alkali Metals	1	LOSE	+1
2	ALKALINE EARTH	2	LOSE	+2
3	BORON FAMILY	3	LOSE	+3
4	CARBON FAMILY	4	EITHER	± 4
5	NITROGEN FAMILY	5	GAIN	-3
6	OXYGEN FAMILY	6	GAIN	-2
7	HALOGENS	7	GAIN	-1
8	NOBLE GASES	8	NEITHER	0

5. Draw the Lewis Dot Diagram for the following atoms and write what charge its ion is most likely to have in the space below the element symbol.



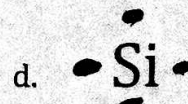
+1



+2



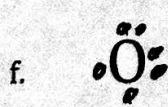
+3



± 4



-3



-2



-1



0

6. If ionic bonding is an attraction between opposite charges, A) which elements will likely bond together? B) Which is already stable? C) Which could form either an anion or cation?

A. KBr
 CaO
 AlN

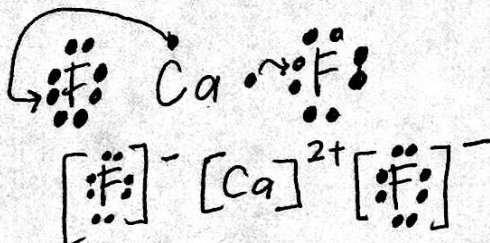
B. Ar

C. Si

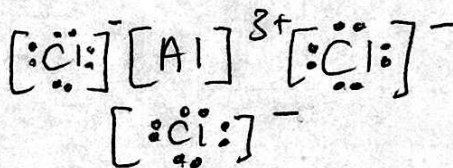
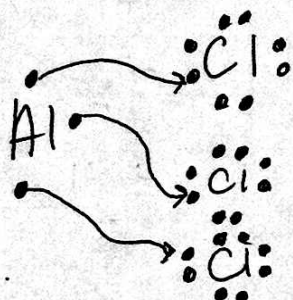
Ionic Compounds Practice

For each of the following, draw the Lewis structures, arrows to show the movement of electrons, and then write the chemical formula for the correct ionic compound. Check your work by doing the criss-cross method.

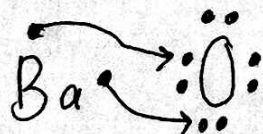
1. Calcium + Fluorine

Formula CaF_2 

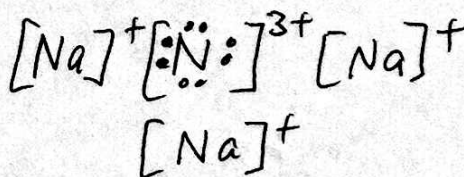
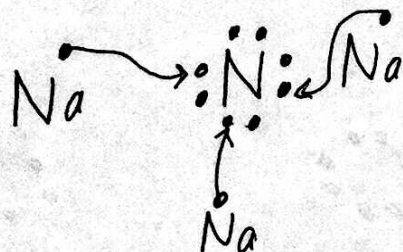
2. Aluminum + Chlorine

Formula AlCl_3 

3. Barium + Oxygen

Formula BaO 

4. Sodium + Nitrogen

Formula Na_3N 

5. Magnesium + Nitrogen

Formula Mg_3N_2 